IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (New): A method for control of operation of a nitrogen oxides trap for an internal combustion engine running on a lean mixture, wherein purging of the nitrogen oxides trap is commanded periodically, and a first oxygen sensor is disposed in an exhaust pipe downstream from the nitrogen oxides trap, the method comprising:

observing evolution of a meaningful signal representative of a signal delivered by the first oxygen sensor;

using an increase of the meaningful signal from a first plateau of substantially constant level, reached following a variation subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture, as an indicator to command an end of purging.

Claim 12 (New): A method according to claim 11, wherein a second oxygen sensor disposed upstream from the nitrogen oxides trap is additionally used to deliver a reference signal, relative to which the evolution of the signal delivered by the first oxygen sensor is compared to deliver the meaningful signal.

Claim 13 (New): A method according to claim 11, wherein the increase of the meaningful signal is detected by applying filtering of a first derivative of the meaningful signal and by comparing the filtered first derivative with a predetermined threshold.

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Claim 14 (New): A method according to claim 12, wherein the increase of the meaningful signal is detected by applying filtering of a first derivative of the meaningful signal and by comparing the filtered first derivative with a predetermined threshold.

Claim 15 (New): A method according to claim 11, wherein the increase of the meaningful signal is detected by applying filtering of a second derivative of the meaningful signal and observing passage of the filtered second derivative through zero in decreasing threshold.

Claim 16 (New): A method according to claim 12, wherein the increase of the meaningful signal is detected by applying filtering of a second derivative of the meaningful signal and observing passage of the filtered second derivative through zero in decreasing threshold.

Claim 17 (New): A method according to claim 11, wherein the increase of the meaningful signal is detected by taking a difference between an instantaneous value of the meaningful signal and a sliding mean of the meaningful signal, and by comparing the difference with a threshold.

Claim 18 (New): A method according to claim 12, wherein the increase of the meaningful signal is detected by taking a difference between an instantaneous value of the meaningful signal and a sliding mean of the meaningful signal, and by comparing the difference with a threshold.

Claim 19 (New): A method according to claim 11, wherein the increase of the meaningful signal, for a lambda sensor, is detected by comparing a voltage value delivered by the first oxygen sensor with a predetermined threshold.

Claim 20 (New): A method according to claim 12, wherein the increase of the meaningful signal, for a lambda sensor, is detected by comparing a voltage value delivered by the first oxygen sensor with a predetermined threshold.

Claim 21 (New): A method according to claim 11, wherein the first oxygen sensor is chosen from among sensors of a sensor of lambda type, proportional oxygen sensor, nitrogen oxides detector, in which the oxygen-concentration measuring function is used.

Claim 22 (New): A method according to claim 12, wherein the first oxygen sensor is chosen from among sensors of a sensor of lambda type, proportional oxygen sensor, nitrogen oxides detector, in which the oxygen-concentration measuring function is used.

Claim 23 (New): A method according to claim 22, wherein the first and second oxygen sensors are of different types.

Claim 24 (New): A device for control of an operation of a nitrogen oxides trap for an internal combustion engine running on a lean mixture, for use of the method according to claim 11, the engine being equipped with an exhaust line containing a nitrogen oxides trap, the device comprising:

a first oxygen sensor disposed on an exhaust line downstream from the nitrogen oxides trap; and

calculating means for determining an increase of a meaningful signal representative of the signal delivered by the first oxygen sensor from a first plateau of substantially constant level, reached following initiation of a purging operation, and using the increase as an indicator to command an end of purging.

Claim 25 (New): A device according to claim 24, further comprising a second oxygen sensor disposed upstream from the nitrogen oxides trap and connected to the calculating means to deliver a reference signal thereto.